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EXAMINER

KISS, ERIC B

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 01/15/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/560,473

Applicant(s)

JOHNSON, WILLIAM S

Examiner

Eric B. Kiss

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Applicant's Appeal Brief filed October 29, 2003, has been received and entered. Claims 1-38 are pending. In response to Applicant's Appeal Brief, the finality of the previous office action is withdrawn, and a new non-final rejection appears below.

#### ***Response to Appeal Brief***

2. The following summarizes the issues presented for Appeal by Applicant and the corresponding action taken by the Examiner:

ISSUE: ***The amendment after final should have been entered since it simplified issues.***

RESPONSE: Applicant's amendment after final has been entered.

ISSUE: ***Claims 1-38 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting in view of co-pending application No. 09/611,087.***

RESPONSE: Applicant's clarification of the intent to address the double patenting issues at a later date is helpful. The provisional rejection of claims 1-38, based on double patenting is maintained until such time as one of the applications issues as a Patent, terminal disclaimer(s) are filed, and/or amendments are made that remove the issue of double patenting.

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ISSUE: *Claims 1-7, 10-16, 27, and 29-38 were rejected under 35 U.S.C. § 103 as being unpatentable over Kirouac et al. in view of Finley et al.*

RESPONSE: This rejection has been withdrawn.

ISSUE: *Claims 8, 9, 17-26, and 28, were rejected under 35 U.S.C. § 103 as being unpatentable over Kirouac et al. in view of Finley et al. and further in view of Fisher et al.*

RESPONSE: This rejection has been withdrawn.

3. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

However, in response to Applicant's arguments with regard to non-analogous art, the Examiner respectfully submits that although Applicant has apparently attempted to argue that only art related to the task of upgrading software at fueling environments can be considered analogous (see Applicant's Appeal Brief, p. 16, last paragraph, through p. 17, second paragraph), the instant application's Field of the Invention section reads as follows:

The present invention relates to updating software in remote locations through the use of an intermediary, a system for tracking what locations have what versions of the software, and a method of assembling a database related to that information.

Further, current claims 1, 3-10, 17-25, and 27-29 do not recite any fueling site features, and are instead broadly directed toward upgrading software in any, unspecified, remote environment.

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Therefore, analogous art is not properly restricted to only those references that specify fueling environments.

### ***Oath/Declaration***

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

Applicant has only acknowledged the duty to disclose information under 37 CFR 1.56(a). The duty to disclose information under 37 CFR 1.56, in its entirety (including 37 CFR 1.56(a-e)), must be acknowledged.

### ***Claim Objections***

5. Claim 1 is objected to because of the following informalities: "to" in line 1 should presumably read --at--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 26 recites the limitation "said fueling site" in line 1. There is insufficient antecedent basis for this limitation in the claim.

In the interest of compact prosecution, the limitation "said fueling site" is subsequently interpreted as reading --said remote location-- for the purpose of further examination.

### ***Double Patenting***

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-38 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-34 of copending

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Application No. 09/611,087 in view of U.S. Patent No. 6,442,448 to Finley et al. The following example is given in which the actual claim language of Application '087 is underlined for clarity.

As per claims 1, 2, and 11 of the instant application, '087 claims (in claim 1):

A method of upgrading software at a remote fueling site from a computer system (a location remote from a corporate computer) comprising:  
accessing a site controller at the remote fueling site (computer at a remote location) with the computer system (corporate computer);

evaluating a database to determine what software upgrades may be available to said remote fueling site; and  
downloading a software upgrade to said site controller from the computer system (uploading a software upgrade to said computer at said remote location) based on said evaluating.

'087 does not claim downloading the software upgrade to a portable computing device or using a portable computing device to access the computer at a remote location. However, Finley teaches accessing a remote computer/site controller (Site Manager (SM)) using a portable computing device (technician's laptop connected to a service serial port) for the purpose of diagnostics and setup (upgrading; see column 10, line 62 through column 12, line 7, and in particular, column 11, lines 32-38). Finley furthermore suggests equivalence between the service serial port and an Ethernet port also disclosed for the purpose of a network connection (see Finley, column 11, lines 28-31, and lines 34-38 for equivalence). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the claimed method of Application '087 to include using a portable computing device to transfer upgrades to the remote computer/site controller as per the teachings of Finley. One

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would be motivated to do so to allow on-site access to the remote computer through a technician's portable interface.

This is a provisional obviousness-type double patenting rejection.

***Claim Rejections - 35 USC § 103***

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 1, 2, 32-34, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,470,288 to Keidel et al.

As per claim 1, *Keidel et al.* disclose accessing a computer at a remote location with a portable computing device (wireless input device/ notebook computer; see, for example, col. 5, lines 39-61); and uploading a software upgrade to said computer at said remote location (see, for example, col. 5, lines 39-61). Although *Keidel et al.* do not expressly disclose downloading the software upgrade from a corporate computer to the portable computing device, the disclosure of *Keidel et al.* would suggest to one of ordinary skill in the art that such downloading is performed. The alternative of a programmer developing code for a software upgrade from scratch on each portable computer would not, in most cases, be practical. Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to include downloading the software upgrade from a corporate computer to the portable computing device



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into the method of *Keidel et al.* One would be motivated to do so to distribute the software upgrades in a practical manner.

As per claim 2, *Keidel et al.* further disclose the remote location comprising a fueling site (see, for example, the Abstract). Therefore, for reasons stated above, such a claim also would have been obvious.

As per claims 32, 33, and 38, *Keidel et al.* discloses a portable computing device (wireless input device/ notebook computer; see, for example, col. 5, lines 39-61); the portable computing device including means to transfer said software upgrade to a fuel dispenser at a remote fueling site (see, for example, col. 5, lines 39-61). Although *Keidel et al.* do not expressly disclose downloading the software upgrade from a corporate computer to the portable computing device, the disclosure of *Keidel et al.* would suggest to one of ordinary skill in the art that such downloading is performed. The alternative of a programmer developing code for a software upgrade from scratch on each portable computer would not, in most cases, be practical. Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to include downloading the software upgrade from a corporate computer to the portable computing device into the system of *Keidel et al.* One would be motivated to do so to distribute the software upgrades in a practical manner.

As per claim 34, Official Notice is taken that with regards to performing the prescribed tasks, including receiving and transferring software data, and having the property of being a portable computing device, a personal digital assistant would have been recognized by one having ordinary skill in the computer art at the time the invention was made to be an equivalent of a laptop computer. Therefore, it would have been obvious to one of ordinary skill in the art at

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the time the invention was made to further modify the system of *Keidel et al.* to use a personal digital assistant instead of a laptop because they are art-recognized equivalents.

12. Claims 5-7, 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Keidel et al.* as applied above to claim 1, in view of U.S. Patent No. 6,601,190 to Meyer et al. and U.S. Patent No. 6,397,247 to Shirakawa et al.

As per claim 5, in addition to the disclosure applied above, *Keidel et al.* disclose the wireless input device/notebook computer being used during fuel dispenser diagnostics (see col. 5, lines 39-54). *Keidel et al.* fail to expressly disclose determining a hardware and software configuration at a remote location. *Meyer et al.* teach "The information offered by diagnostics programs is usually extensive, detailed information relating to hardware and software configurations, minor changes in which are usually the cause of computer faults," (see col. 1, lines 31-34). *Shirakawa et al.* teach determining a hardware and software configuration at a remote location (see, for example, col. 10, lines 46-50; and col. 11, line 63, through col. 12, line 11). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the method of *Keidel et al.* to include determining a hardware and software configuration at the remote location as part of the disclosed fuel dispenser diagnostics in accordance with the teachings of *Meyer et al.* and *Shirakawa et al.* One would be motivated to do so to provide commonly required diagnostics information.

As per claims 6, 7, and 10, in addition to the disclosure and teachings applied above, *Shirakawa et al.* further teach storing a record indicative of said hardware and software configuration (see, for example, col. 11, line 63, through col. 12, line 11); subsequently

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providing said record indicative of said hardware and software configuration to said corporate computer (col. 11, line 63, through col. 12, line 11); and compiling a database of a plurality of records indicative of said hardware and software configurations (col. 11, line 63, through col. 12, line 11). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the method of *Keidel et al.* to include such processing/storing of configuration information as per the further teachings of *Shirakawa et al.* One would be motivated to do so provide a readily accessible repository of configuration information for a collection of managed remote sites.

As per claim 12, *Keidel et al.* disclose accessing a computer at a remote location with a portable computing device (wireless input device/ notebook computer; see, for example, col. 5, lines 39-61). *Keidel et al.* further disclose the wireless input device/notebook computer being used during fuel dispenser diagnostics (see col. 5, lines 39-54).

*Keidel et al.* fail to expressly disclose polling with said portable computer device, hardware and software existent at a remote location. *Meyer et al.* teach “The information offered by diagnostics programs is usually extensive, detailed information relating to hardware and software configurations, minor changes in which are usually the cause of computer faults,” (see col. 1, lines 31-34). *Shirakawa et al.* teach determining a hardware and software configuration at a remote location (see, for example, col. 10, lines 46-50; and col. 11, line 63, through col. 12, line 11). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the method of *Keidel et al.* to include polling hardware and software existent at the remote location as part of the disclosed fuel dispenser

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diagnostics in accordance with the teachings of *Meyer et al.* and *Shirakawa et al.* One would be motivated to do so to provide commonly required diagnostics information.

*Shirakawa et al.* further teach storing a record indicative of said hardware and software configuration (see, for example, col. 11, line 63, through col. 12, line 11); subsequently providing said record indicative of said hardware and software configuration to said corporate computer (col. 11, line 63, through col. 12, line 11); and compiling a database of a plurality of records indicative of said hardware and software configurations (col. 11, line 63, through col. 12, line 11). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the method of *Keidel et al.* to include such processing/storing of configuration information as per the further teachings of *Shirakawa et al.* One would be motivated to do so provide a readily accessible repository of configuration information for a collection of managed remote sites.

Further, although *Keidel et al.* fail to expressly disclose sending the individual equipped with the portable computing device to a plurality of fueling sites, it would have been obvious to one of ordinary skill in the art at the time the invention was made further modify the method of *Keidel et al.* to include visiting a plurality of sites in view of the teachings applied above. One would be motivated to do so to properly manage multiple sites.

As per claim 13, *Keidel et al.* inherently disclose providing a portable computing device to said individual.

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Keidel et al.* as applied above to claim 1, and further in view of U.S. Patent No. 5,745,268 to Eastvold et al.

As per claim 3, *Keidel et al.* fail to expressly disclose storing a record indicative of a quantity of upgrades performed. However, *Eastvold et al.* teach, as part of a system where a field service engineer accesses a computer at a remote location using a portable computing device (field service notebook (see, for example, col. 18, line 20, through col. 21, line 59); and a generated site history log containing the version and timestamp for upgrades performed by a field service engineer (see, for example, col. 12, line 66, through col. 13, line 17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method of *Keidel et al.* to include storing a record indicative of a quantity of upgrades performed as per the teachings of *Eastvold et al.* One would be motivated to do so to provide more complete diagnostics information and provide tracking information for software upgrades performed.

14. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Keidel et al.* as applied above to claim 1, and further in view of Nathan J. Muller, "Focus on OpenView: A Guide to Hewlett-Packard's Network and Systems Management Platform," 1995, CBM Books (hereinafter *Muller*).

As per claims 8 and 9, *Keidel et al.* fail to expressly disclose accessing said corporate computer to secure an accounting for upgrades installed and accounting for royalties due a third party based on said upgrades installed. However, *Muller* teaches "Part of managing software is knowing what applications are installed throughout the distributed environment, which allows for better planning of software purchases and license conformance," (see p. 182, paragraph 5). One of ordinary skill in the art would recognize that license conformance includes accounting for

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royalties due for software installed. Further, the context of *Muller*'s software management is an environment of remote software distribution to multiple target computers, wherein the installation is managed by a controller system (see, for example, the preceeding text of *Muller*, beginning on p. 179 under the heading "SOFTWARE DISTRIBUTOR"). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the method of *Keidel et al.* to include accessing a corporate computer as part of accounting for royalties associated with installed software upgrades in view of the teachings of *Muller*. One would be motivated to do so to facilitate compliance with software licensing agreements.

15. Claims 4, 11, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Keidel et al.* as applied above to claims 1 and 32, and further in view of U.S. Patent No. 6,442,448 to Finley et al.

As per claim 4, *Keidel et al.* fail to expressly disclose downloading said software upgrade from said computer to a peripheral device. However, *Finley et al.* teach accessing a site controller at a fueling site using a laptop computer interface for diagnostics and setup (see, for example, col. 11, lines 32-38). *Finley et al.* further teach providing software upgrades to a site manager, which manages upgrading of peripheral device (fuel dispenser/dispenser controller) software (see, for example, col. 7, line 55, through col. 14, line 32, discussing the software, hardware, and communications aspects of the site manager). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method of *Keidel et al.* to include downloading a software upgrade from the computer to a

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peripheral device as per the teachings of *Finley et al.* One would be motivated to do so to gain the advantage of providing diagnostics/upgrading capability for multiple fuel dispensers, as provided in the teachings of *Finley et al.*, through a single interface.

As per claim 11, *Keidel et al.* fail to expressly disclose accessing a site controller at a fueling site. However, *Finley et al.* teach accessing a site controller at a fueling site using a laptop computer interface for diagnostics and setup (see, for example, col. 11, lines 32-38). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the method of *Keidel et al.* to include accessing a site controller using the wireless input device for diagnostics/upgrading. One would be motivated to do so to gain the advantage of providing diagnostics/upgrading capability for multiple fuel dispensers, as provided in the teachings of *Finley et al.*, through a single interface.

As per claim 37, *Keidel et al.* fail to expressly disclose accessing a site controller at a fueling site. However, *Finley et al.* teach accessing a site controller at a fueling site using a laptop computer interface for diagnostics and setup (see, for example, col. 11, lines 32-38). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the method of *Keidel et al.* to include accessing a site controller using the wireless input device for diagnostics/upgrading. One would be motivated to do so to gain the advantage of providing diagnostics/upgrading capability for multiple fuel dispensers, as provided in the teachings of *Finley et al.*, through a single interface.

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16. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Keidel et al.* in view of *Meyer et al.* and *Shirakawa et al.*, as applied above to claim 12, and further in view of *Finley et al.*

As per claim 14, although *Keidel et al.*, *Meyer et al.*, and *Shirakawa et al.* fail to expressly disclose or teach uploading to said corporate computer through a web based interface, *Finley et al.* teach a web-based interface (SMTP email client) through which data can be sent to a corporate computer (see, for example, col. 24, lines 47-59). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to include such a web-based interface for communicating with a corporate computer. One would be motivated to do so to provide a standard protocol for data communication.

As per claim 15, although *Keidel et al.*, *Meyer et al.*, and *Shirakawa et al.* fail to expressly disclose or teach polling through a site controller, *Finley et al.* teach accessing a site controller at a fueling site using a laptop computer interface for diagnostics and setup (see, for example, col. 11, lines 32-38). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the method of *Keidel et al.* to include polling through a site controller using the wireless input device for diagnostics/upgrading. One would be motivated to do so to gain the advantage of providing diagnostics/upgrading capability for multiple fuel dispensers, as provided in the teachings of *Finley et al.*, through a single interface.

17. Claims 16, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Keidel et al.* in view of *Meyer et al.* and *Shirakawa et al.*, and further in view of *Muller*.



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As per claim 16, the relevant teaching and motivation for modifying *Keidel et al.* to include generating a database from said plurality of records has been addressed as set forth above in the rejection of claim 12. Further, *Muller* teaches, "Part of managing software is knowing what applications are installed throughout the distributed environment, which allows for better planning of software purchases and license conformance," (see p. 182, paragraph 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method of *Keidel et al.* to generate recommendations as to potential upgrades from such a database that contains information about what applications are installed at particular sites. One would be motivated to do so to take advantage of known information to better manage system software resources.

As per claims 35 and 36, see the disclosure and teachings applied above to claims 12, 16, and 32. For reasons stated above, such claims also would have been obvious.

18. Claims 17-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Keidel et al.* in view of *Eastvold et al.*, *Muller*, and *Shirakawa et al.*

As per claims 17, 18, 20, 21, and 23, *Keidel et al.* disclose providing software upgrades on a portable computing device (wireless input device/ notebook computer; see, for example, col. 5, lines 39-61); directing said portable computing device to a remote fueling site (see, for example, col. 5, lines 39-61); accessing with said portable computing device a computer at said remote location (see, for example, col. 5, lines 39-61); and upgrading one or more software components of one or more computers at said remote location (see, for example, col. 5, lines 39-61).

*Keidel et al.* fail to expressly disclose storing a record indicative of a quantity of upgrades performed. However, *Eastvold et al.* teach, as part of a system where a field service engineer accesses a computer at a remote location using a portable computing device (field service notebook (see, for example, col. 18, line 20, through col. 21, line 59); and a generated site history log containing the version and timestamp for upgrades performed by a field service engineer (see, for example, col. 12, line 66, through col. 13, line 17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method of *Keidel et al.* to include storing a record indicative of a quantity of upgrades performed as per the teachings of *Eastvold et al.* One would be motivated to do so to provide more complete diagnostics information and provide tracking information for software upgrades performed.

*Keidel et al.* fail to expressly disclose accessing said corporate computer to secure an accounting for upgrades installed and accounting for royalties due a third party based on said upgrades installed. However, *Muller* teaches “Part of managing software is knowing what applications are installed throughout the distributed environment, which allows for better planning of software purchases and license conformance,” (see p. 182, paragraph 5). One of ordinary skill in the art would recognize that license conformance includes accounting for royalties due for software installed. Further, the context of *Muller*’s software management is an environment of remote software distribution to multiple target computers, wherein the installation is managed by a controller system (see, for example, the preceeding text of *Muller*, beginning on p. 179 under the heading “SOFTWARE DISTRIBUTOR”). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was

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made to further modify the method of *Keidel et al.* to include accessing a corporate computer as part of accounting for royalties associated with installed software upgrades in view of the teachings of *Muller*. One would be motivated to do so to facilitate compliance with software licensing agreements.

As per claim 19, Official Notice is taken that it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to record commissioning obligations. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method of *Keidel et al.* to include determination/payment of commissioning obligations. One would be motivated to do so to promote an efficient work schedule for a technician traveling to several remote sites by paying per upgrade rather than per hour worked.

As per claims 22 and 24, *Keidel et al.* fail to expressly disclose storing a version number associated with each of said any upgrades and storing a version number associated with software existent prior to said upgrade. However, *Eastvold et al.* teach the generated site history log containing the version and timestamp for upgrades performed by a field service engineer (see, for example, col. 12, line 66, through col. 13, line 17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method of *Keidel et al.* to include storing a version number associated with each of said any upgrades and storing a version number associated with software existent prior to said upgrade as per the teachings of *Eastvold et al.* One would be motivated to do so to provide more complete diagnostics information and provide tracking information for software upgrades performed.

As per claims 25 and 26, although *Keidel et al.* fail to expressly disclose determining if said upgrading resulted from a warranty contract and accounting for said remote location if said upgrading fell outside of any warranty contract obligation, Official Notice is taken that it was well known and common practice in the computer art at the time the invention was made to determine if upgrading resulted from a warranty contract, i.e. checking to see if a registered software component is within a warranty period at the time of upgrade, and accounting for a remote site if upgrading fell outside of any warranty contract obligation, i.e. if the warranty is expired, charging for said upgrading. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method of *Keidel et al.* to include determination/payment relating to warranty conditions. One would be motivated to do so to ensure that services rendered comply with warranty obligations and appropriate fees, if any, are collected.

19. Claims 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Keidel et al.* in view of *Eastvold et al.*, *Meyer et al.*, and *Shirakawa et al.*

As per claim 27, *Keidel et al.* disclose a portable computing device (wireless input device/ notebook computer; see, for example, col. 5, lines 39-61) configured to communicate with a computer at a remote location and install one or more software upgrade packages (see, for example, col. 5, lines 39-61). Although *Keidel et al.* do not expressly disclose downloading the software upgrade from a corporate computer to the portable computing device, the disclosure of *Keidel et al.* would suggest to one of ordinary skill in the art that such downloading is performed. The alternative of a programmer developing code for a software upgrade from scratch on each

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portable computer would not, in most cases, be practical. Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to include downloading the software upgrade from a corporate computer to the portable computing device into the device of *Keidel et al.* One would be motivated to do so to distribute the software upgrades in a practical manner.

*Keidel et al.* fail to expressly disclose polling with said portable computer device, hardware and software existent at a remote location. *Meyer et al.* teach “The information offered by diagnostics programs is usually extensive, detailed information relating to hardware and software configurations, minor changes in which are usually the cause of computer faults,” (see col. 1, lines 31-34). *Shirakawa et al.* teach determining a hardware and software configuration at a remote location (see, for example, col. 10, lines 46-50; and col. 11, line 63, through col. 12, line 11). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the device of *Keidel et al.* to include polling hardware and software existent at the remote location as part of the disclosed fuel dispenser diagnostics in accordance with the teachings of *Meyer et al.* and *Shirakawa et al.* One would be motivated to do so to provide commonly required diagnostics information.

*Keidel et al.* fail to expressly disclose storing a record indicative of a quantity of upgrades performed. However, *Eastvold et al.* teach, as part of a system where a field service engineer accesses a computer at a remote location using a portable computing device (field service notebook (see, for example, col. 18, line 20, through col. 21, line 59); and a generated site history log containing the version and timestamp for upgrades performed by a field service engineer (see, for example, col. 12, line 66, through col. 13, line 17). Therefore, it would have been

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obvious to one of ordinary skill in the art at the time the invention was made to further modify the device of *Keidel et al.* to include storing a record indicative of a quantity of upgrades performed as per the teachings of *Eastvold et al.* One would be motivated to do so to provide more complete diagnostics information and provide tracking information for software upgrades performed.

As per claim 29, although *Keidel et al.* fail to expressly disclose installing a patch to enable functionality of said software upgrade on said computer at said remote location, Official Notice is taken that patching has been a well-known means of facilitating software upgrades. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the device of *Keidel et al.* to include installing a patch to enable functionality of said software upgrade on said computer at said remote location. One would be motivated to do so to provide more efficient software upgrading by only updating those portions of code that need to be updated.

20. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Keidel et al.* in view of *Eastvold et al.*, *Meyer et al.*, and *Shirakawa et al.*, as applied to claim 27 above, and further in view of *Muller*.

As per claim 28, *Keidel et al.* fail to expressly disclose accessing said corporate computer to secure an accounting for upgrades installed and accounting for royalties due a third party based on said upgrades installed. However, *Muller* teaches "Part of managing software is knowing what applications are installed throughout the distributed environment, which allows for better planning of software purchases and license conformance," (see p. 182, paragraph 5).

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One of ordinary skill in the art would recognize that license conformance includes accounting for royalties due for software installed. Further, the context of *Muller*'s software management is an environment of remote software distribution to multiple target computers, wherein the installation is managed by a controller system (see, for example, the preceeding text of *Muller*, beginning on p. 179 under the heading "SOFTWARE DISTRIBUTOR"). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the device of *Keidel et al.* to include accessing a corporate computer as part of accounting for royalties associated with installed software upgrades in view of the teachings of *Muller*. One would be motivated to do so to facilitate compliance with software licensing agreements.

21. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Keidel et al.* in view of *Finley et al.*, *Meyer et al.*, and *Shirakawa et al.*

As per claim 30, *Keidel et al.* discloses a portable computing device (wireless input device/ notebook computer; see, for example, col. 5, lines 39-61); a remote fueling site including means to upload said software upgrade from said portable computing device (see, for example, col. 5, lines 39-61). Although *Keidel et al.* do not expressly disclose downloading the software upgrade from a corporate computer to the portable computing device, the disclosure of *Keidel et al.* would suggest to one of ordinary skill in the art that such downloading is performed. The alternative of a programmer developing code for a software upgrade from scratch on each portable computer would not, in most cases, be practical. Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to include

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downloading the software upgrade from a corporate computer to the portable computing device into the system of *Keidel et al.* One would be motivated to do so to distribute the software upgrades in a practical manner.

*Keidel et al.* fail to expressly disclose accessing a site controller at a fueling site.

However, *Finley et al.* teach accessing a site controller at a fueling site using a laptop computer interface for diagnostics and setup (see, for example, col. 11, lines 32-38). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the system of *Keidel et al.* to include accessing a site controller using the wireless input device for diagnostics/upgrading. One would be motivated to do so to gain the advantage of providing diagnostics/upgrading capability for multiple fuel dispensers, as provided in the teachings of *Finley et al.*, through a single interface.

*Keidel et al.* disclose the wireless input device/notebook computer being used during fuel dispenser diagnostics (see col. 5, lines 39-54). *Keidel et al.* fail to expressly disclose determining a hardware and software configuration at a remote location. *Meyer et al.* teach "The information offered by diagnostics programs is usually extensive, detailed information relating to hardware and software configurations, minor changes in which are usually the cause of computer faults," (see col. 1, lines 31-34). *Shirakawa et al.* teach determining a hardware and software configuration at a remote location (see, for example, col. 10, lines 46-50; and col. 11, line 63, through col. 12, line 11). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the system of *Keidel et al.* to include determining a hardware and software configuration at the remote location as part of the disclosed fuel dispenser diagnostics in accordance with the teachings of *Meyer et al.* and



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*Shirakawa et al.* One would be motivated to do so to provide commonly required diagnostics information.

*Shirakawa et al.* further teach storing a record indicative of said hardware and software configuration (see, for example, col. 11, line 63, through col. 12, line 11); subsequently providing said record indicative of said hardware and software configuration to said corporate computer (col. 11, line 63, through col. 12, line 11); and compiling a database of a plurality of records indicative of said hardware and software configurations (col. 11, line 63, through col. 12, line 11). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the system of *Keidel et al.* to include such processing/storing of configuration information as per the further teachings of *Shirakawa et al.* One would be motivated to do so provide a readily accessible repository of configuration information for a collection of managed remote sites.

As per claim 31, Official Notice is taken that it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to record commissioning obligations. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the system of *Keidel et al.* to include determination/payment of commissioning obligations. One would be motivated to do so to promote an efficient work schedule for a technician traveling to several remote sites by paying per upgrade rather than per hour worked.

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***Conclusion***

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

23. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (703) 305-7737. The Examiner can normally be reached on Tue. - Fri., 7:30 am - 5:00 pm. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

EBK / EBK  
January 9, 2004



**TUAN DAM  
SUPERVISORY PATENT EXAMINER**